

Irving 7715 (TEX).—Robert S. Irving, 1422 Summit, Little Rock, AR 72202.

REFERENCES

- IRVING, R. S. 1976. Chromosome numbers in *Hedeoma* (Labiatae) and related genera. Syst. Bot. 1: 46–56.
 ———, S. BRENHOLTS, & D. D. IRVING. 1979. Artificial hybridization in *Hedeoma* (Labiatae). Syst. Bot. 4: 1–15.

NEW AND RE-INSTITUTED COMBINATIONS IN *GUTIERREZIA* (COMPOSITAE: ASTEREAE).—In connection with monographic work on what is commonly known as the *Xanthocephalum* complex, and treatment of these genera for the *Flora of the Chihuahuan Desert Region* (M. C. Johnston, and collaborators, in preparation), the combinations listed below are necessary. Justification of such dispositions and full synonymy will be provided in a forthcoming doctoral dissertation on the group.

There is strong morphological and chromosomal evidence supporting the close alliance of the species of the former genus *Greenella* with those of *Gutierrezia*, reflected here by the transfer of *Greenella arizonica* and *G. ramulosa* into *Gutierrezia*. The third species of *Greenella*, *G. discoidea* Gray (Proc. Amer. Acad. Arts 19: 2. 1883), which is known only by the type material, has been found by this author to be a rayless form of *Xanthocephalum wrightii* (Gray) Gray. Since I have here returned this latter species to *Gutierrezia* also, the genus *Greenella* as a whole is reduced to synonymy. The only objection that Gray himself had to this placement was ray-floret color, and since there are several South American *gutierrezias* with white rays, maintenance of a distinct genus on that basis is meaningless.

As a result of these transfers and the changes of status of two of the taxa involved, there are now 14 North American species of *Gutierrezia*. *Gymnosperma glutinosum* is closely related to this group and may be transferred to *Gutierrezia* in the future; this taxonomic decision must await additional study.

1. *GUTIERREZIA conoidea* (Hemsley) Lane, comb. nov. Based on: *Xanthocephalum conoideum* Hemsley, Biol. Centr. Amer. 2: 109–112. 1882.

2. *GUTIERREZIA ALAMANI* Gray, Smithsonian Contr. Knowl. 3(5): 91 (Pl. Wright. 1: 91). 1850. This species has been known most recently as *Xanthocephalum linearifolium* (DC) Greenman (Publ. Field Mus. Nat. Hist. Bot. series 2: 345. 1912), based on *Keerlia linearifolia* DC (Prod. 5: 309–310. 1836). However, when placed in *Gutierrezia*, it must take Gray's epithet because of the pre-existence of *G. linearifolia* Lag. (Gen. et Sp. Nov. 30. 1816).

3. *GUTIERREZIA ALAMANI* Gray var. *megalocephala* (Fernald) Lane, comb. & stat. nov. Based on: *Xanthocephalum megalocephalum* Fernald,

Proc. Amer. Acad. Arts 36: 505. 1901.

4. *GUTIERREZIA sericocarpa* (Gray) Lane, comb. nov. Based on: *Xanthocephalum sericocarpum* Gray, Proc. Amer. Acad. Arts 15: 31–32. 1880.

5. *GUTIERREZIA WRIGHTII* Gray, Smithsonian Contr. Knowl. 5(6): 78 (Pl. Wright. 2: 78). 1883. Gray himself later transferred this species to *Xanthocephalum* (Proc. Amer. Acad. Arts 8: 632. 1873), but my work has convinced me that the original placement is more correct.

6. *GUTIERREZIA arizonica* (Gray) Lane, comb. nov. Based on: *Greenella arizonica* Gray, Proc. Amer. Acad. Arts 16: 81–82. 1880.

7. *GUTIERREZIA ramulosa* (Greene) Lane, comb. nov. Based on: *Greenella ramulosa* Greene, Pittonia 1: 302–303. 1887.

8. *GUTIERREZIA SPHAEROCEPHALA* Gray, Mem. Amer. Acad. Arts n.s. 4(1): 73–74 (Pl. Fendl. 73–74). 1849. This species was transferred by Shinnars to *Xanthocephalum* and considered by Solbrig to be a synonym of *Gutierrezia glutinosa*, however, in my treatment it will receive specific status in *Gutierrezia*.

9. *GUTIERREZIA TEXANA* (DC) T. & G. var. *glutinosa* (S. Schauer) Lane, comb. & stat. nov. Based on: *Hemiachyris glutinosa* S. Schauer, Linnaea 19: 724. 1847.—Meredith A. Lane, Department of Botany, University of Texas, Austin, TX 78712.

HESPERALOE FUNIFERA (AGAVACEAE) IN TEXAS.—*Hesperaloe funifera* (Koch) Trelease was collected in the course of field work for a Texas Natural Area Survey of the Devil's River—Dolen Falls area in Val Verde Co. (Smith, J. M. and M. Butterwick. 1975. A Vegetational Survey of the Devil's River—Dolan Creek Area. In A Natural Area Survey Part VI of VIII. Division of Natural Resources and Environment, The University of Texas, Austin, Texas. Available at the Texas State Library). This species is known from northern Mexico from eastern and central Coahuila to Nuevo Leon (one station) and San Luis Potosí (several stations) (R. Engard, Desert Botanical Garden, Phoenix, pers. comm.). A small Texas population was observed in shallow limestone soils of rocky upper slopes, ca. 5 km ENE of the Finnegan Ranchhouse (29° 56' N, 100° 55' W). An additional individual has been transplanted at the entrance of the Finnegan ranch. *Hesperaloe funifera* with its large (to 5 cm wide and 2 m long), rigid leaves and purplish-green, glaucous flowers is easily distinguished from *H. parviflora* (Torr.) Coult. which has linear, arcuately spreading leaves (2.5 cm wide and 1.2 m long), and rosey-red to salmon colored flowers. Collection data: In rocky limestone soil at the entrance to the Finnegan Ranch (29° 56' N, 100° 58' W), ca 65 km NW of Del Rio, Val Verde Co., 2 Aug